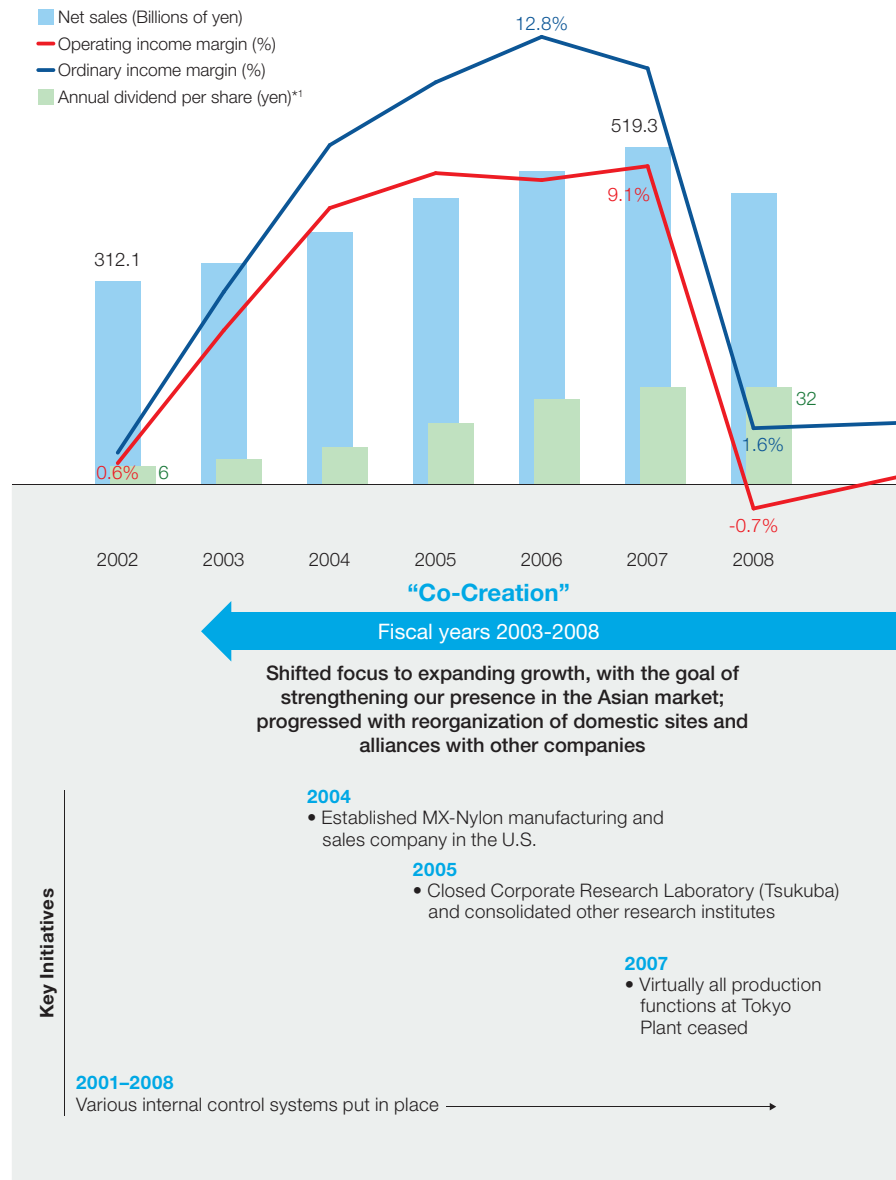


Evolution of Management Strategy

Past Medium-Term Management Plans and Operating Performance

In its medium-term management plans, MGC has set forth themes such as “globalization” and “business development based on proprietary technology,” and over the past 18 years, sales have largely remained on a growth track. Operating income fell significantly with the global financial crisis that occurred in fiscal 2008, but has subsequently recovered. In the near term, products less vulnerable to market conditions have seen steady growth even in the midst of the COVID-19 pandemic, ensuring a certain level of income. That said, volatility remains high, and issues include reducing dependence on the external environment, such as market conditions; accelerating expansion of high value-added products; and developing new businesses.

In the new Medium-Term Management Plan starting in fiscal 2021, we are working to resolve these issues by firmly pushing ahead with business portfolio reforms in an effort to achieve sustained growth.



Review of MGC Advance 2020 (Fiscal years 2018-2020), the Previous Medium-Term Management Plan

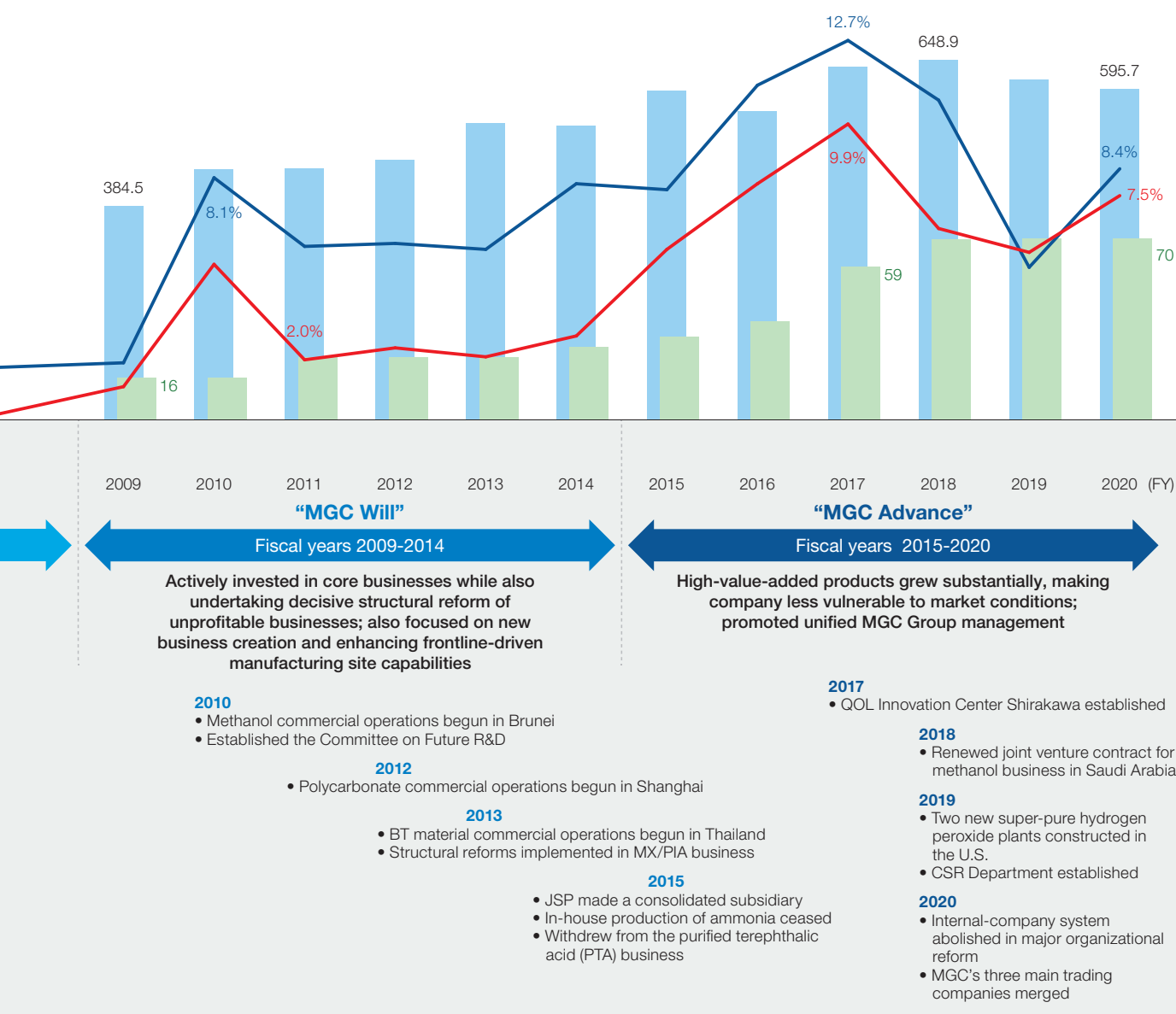
The MGC Group fell short of the management indicators set as targets for the final year of MGC Advance 2020, the previous Medium-Term Management plan.

This was the result of external factors, such as oversupply due to the rise of emerging countries and a downturn in commodity product markets associated with US/China trade friction, as well as a decline in demand for some products due to the impact of the COVID-19 pandemic. Internal factors, including the maturation of existing business structures and delays in creating and developing new businesses, also played a role.

Meanwhile in core and semi-core businesses, there was steady growth in products unaffected by market conditions, which have maintained their competitive advantage and led to solving social issues, while markets have also continued to grow.

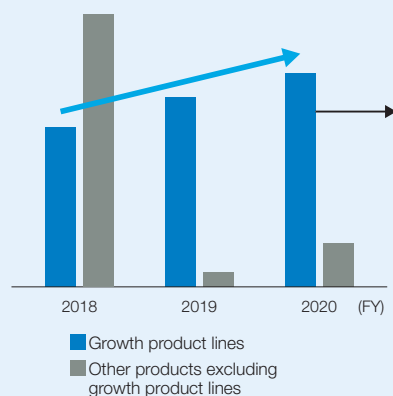
Consolidated Performance	Fiscal 2018 Results	Fiscal 2019 Results	Fiscal 2020 Results	Fiscal 2020 Targets
Net sales (billions of yen)	648.9	613.3	595.7	750.0
Operating income (billions of yen)	41.3	34.2	44.5	65.0
Ordinary income (billions of yen)	69.1	31.1	50.2	80.0*2
ROE (Return on equity)	11.3%	4.3%	7.1%	12% or higher

*2 Initial target was ¥90 billion. Revised to ¥80 billion due to change in framework for methanol joint venture on May 13, 2019



*1 With an effective date of October 1, 2016, MGC conducted a reverse stock split for MGC's ordinary shares on a 2:1 basis. As a result, annual dividend amounts per share above are calculated assuming that the reverse stock split had been conducted at the beginning of FY2002.

Change in Ordinary Income in Growth Product Lines and Other Products



Key Initiatives

- Expansion of optical polymers manufacturing plant
- Expansion of super-pure hydrogen peroxide manufacturing plants in North America and South Korea
- Pursuit of leading-edge technology development, including next-generation low-loss BT materials and others
- Capturing of new markets through development of aromatic aldehyde applications

Typical Growth Products

- Meta-xylenediamine (MXDA)
- Aromatic aldehydes
- MX-Nylon
- Electronic chemicals
- Polyacetal
- Optical polymers
- IC plastic packaging BT materials

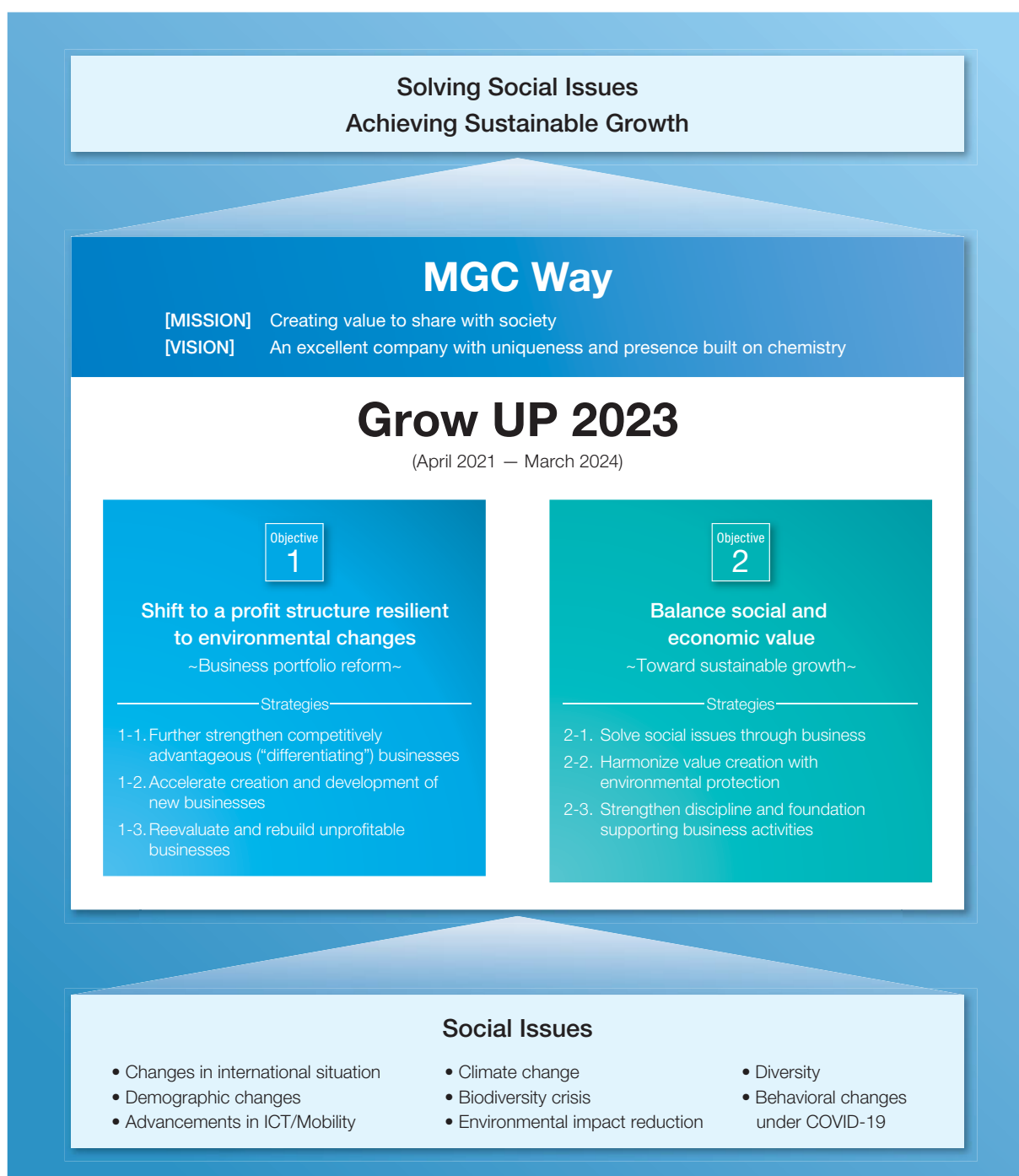
New Medium-Term Management Plan

Overview of the New Medium-Term Management Plan

For MGC to achieve sustained growth, it is essential that we create a structure capable of responding to rapid changes in the business environment and rising uncertainty, while further strengthening our competitiveness. In the new Medium-Term Management Plan beginning in fiscal 2021, we have established two management objectives and a number of strategies based on the backcasting approach, with a long-term vision for the future. The future is not merely an extension of the status quo, and will require rapid, organization-wide adaptation to a “new normal” as well as advanced technology based on achieving

discontinuous evolution. Over the next three years, we will accomplish a shift to a profit structure resilient to changes in the business environment.

Note that the name “Grow UP 2023” not only incorporates the immutable concept of growth for both the MGC Group and its employees, but the added meanings of “**U**niqueness” and “**P**resence,” from where we derive “UP.” Our goal is to become an excellent corporate group as we nurture our uniqueness and presence within the chemical industry.



Why We Established a New Corporate Philosophy

Uncertainty in society is rising rapidly as a series of global-scale issues come to the fore. We believed that in times such as these, the MGC Group must take a longer-term view in envisioning the future of our business, redefining for ourselves the reason for our existence. In the process of envisioning the future around the year 2050 as a frame of reference for formulating strategy, we reexamined our existing corporate philosophy from a global perspective, and created a new one defining our purpose and our vision for the future which we call the “MGC Way.” At the highest level, “Creating value to share with society” represents our

social mission and our reason for being. As we work to fulfill this mission, we defined the vision we wish to achieve in the near future, namely “An excellent company with uniqueness and presence built on chemistry.” As we put our Principles of Conduct (values) into practice in our day-to-day work, our goal is to develop business around social issues in areas where we can demonstrate our uniqueness and strength in order to solve those issues and thus be recognized by, and become the favored choice for, society for our uniqueness.

Numerical Targets

We will attempt to reach record-high levels of operating income in fiscal 2023, the final year of the new Medium-Term Management Plan. By the mid-2020s, our goal is to go on to set a new record high for operating income margin as well. We also have in sight achieving sales of

¥1 trillion or higher and operating income of ¥100 billion (operating income margin of 10%) or higher in 10 years, i.e. by fiscal 2030. To promote management with an awareness of capital efficiency, we have also introduced return on invested capital (ROIC) as a new KPI.

Consolidated Performance	Fiscal 2020 Results	Fiscal 2023 Targets	Medium to Long-term Objectives Fiscal 2030
Net sales (billions of yen)	595.7	730.0	
Operating income (billions of yen)	44.5	70.0	
Ordinary income (billions of yen)	50.2	80.0	
Return on invested capital (ROIC ^{*1})	7.7%	10% or higher	
Return on earnings (ROE ^{*2})	7.1%	9% or higher	
			Net sales: ¥1 trillion Operating income: ¥100 billion or higher

(Assumptions) Exchange rate: 105 JPY/USD; Crude oil price (Dubai): 60 USD/BBL

*1 ROIC = Ordinary income/invested capital

*2 ROE = Net income/equity

Financial, Capital and Shareholder Return Policies

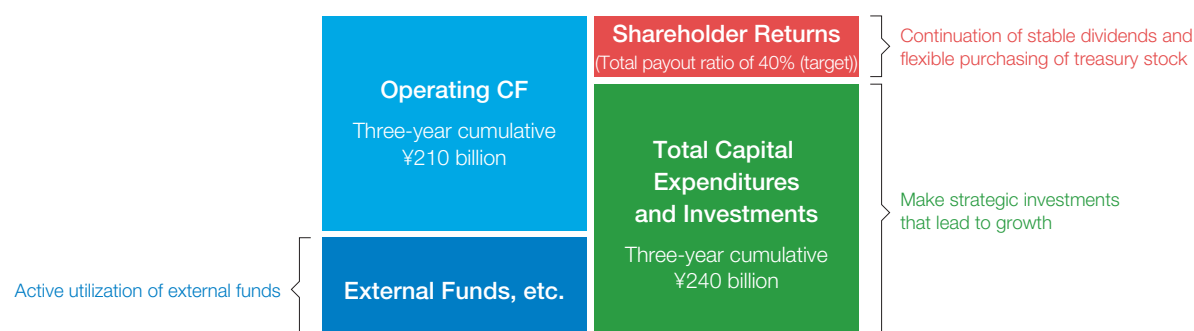
Based on the belief that improving corporate value benefits all stakeholders, the MGC Group seeks to maintain an optimal balance between shareholder returns and internal reserves from a comprehensive perspective encompassing investment plans, financial soundness, and the outlook for future business performance.

Total capital expenditures and investments are expected to reach ¥240 billion under the new Medium-Term Management Plan, in excess of planned three-year

cumulative operating cash flow. We will make strategic investments that lead to growth while actively utilizing external funds.

Our basic policy regarding dividends is to continue to provide stable returns while flexibly purchasing treasury stock, with a total payout ratio^{*3} of 40% as a target for medium-term shareholder returns.

*3 Total payout ratio against net income attributable to owners of parent, including purchases of treasury stock



Objective
1

Shift to a Profit Structure Resilient to Environmental Changes

~Business Portfolio Reform~

1-1. Further strengthen competitively advantageous (“differentiating”) businesses

- Prioritize allocation of management resources to high-value-added products defined as differentiating businesses
- Shift foundation businesses to differentiating businesses by making them high-added-value and high-efficiency

1-2. Accelerate creation and development of new businesses

- Revise R&D organization and put in place an environment that encourages market expansion
- Proactive R&D investment, increase in research personnel

1-3. Reevaluate and rebuild unprofitable businesses

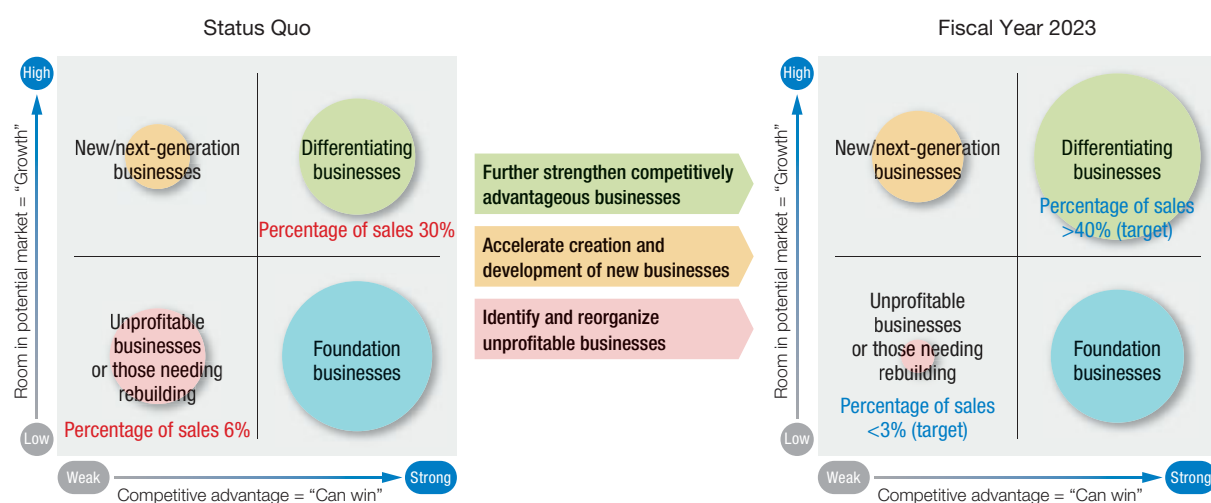
- Improve business profitability by identifying and reorganizing unprofitable businesses

One objective set out in Grow UP 2023, our new Medium-Term Management Plan, is to shift to a profit structure resilient to changes in the business environment. In advancing that objective, we first classified the MGC Group’s businesses based on growth potential, contribution to profit and capital efficiency. Those with particularly high competitiveness and growth potential are defined as “differentiating businesses.” Products in these businesses include MXDA, MX Nylon, Aromatic aldehydes, Polyacetal and other chemical products and materials. Further, functional products such as electronic chemicals, BT materials, optical polymers and ultra-high refractive lens monomers are also included in this differentiating businesses category. We will focus on investing management resources on developing markets and boosting production capacity for these products, strengthening profitability.

In addition to the above strategies, we will accelerate business portfolio reform by focusing on creating and developing new businesses. Specifically, we will promote investment in research and development and increase research personnel; reorganize based on market needs; and promote a more advanced, efficient research process utilizing the latest AI and MI^{*4}, leading to the ongoing introduction of new products. In addition, we will begin working on identifying and reorganizing unprofitable businesses while shifting to a profit structure resilient to changes in the environment. Note that in terms of quantitative targets, we aim to grow net sales from differentiating businesses to more than 40% of overall sales in fiscal 2023, while reducing net sales from unprofitable businesses and those needing rebuilding to less than 3%.

^{*4} Materials informatics: a method for efficiently exploring new and alternative materials utilizing information processing technology, including machine learning and deep learning

Business Portfolio Structure (Image)



Classification of Product Lines under New Medium-Term Management Plan

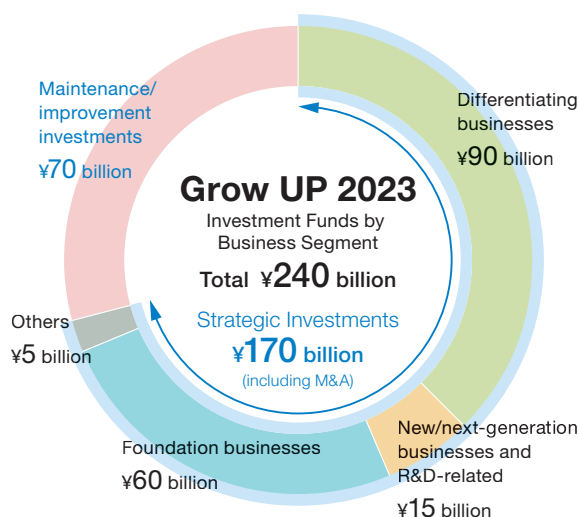
Differentiating businesses	MXDA, aromatic aldehydes, MX-Nylon, electronic chemicals, polyacetal, optical polymers, ultra-high refractive lens monomer, IC plastic packaging BT material, and others
New/next-generation businesses (including products in development stage)	Medical/Food: OXYCAPT™, bio-products, contract manufacturing of antibody drugs, factory-produced vegetables, and others ICT/Mobility: Solid electrolytes, cellulose fiber composite materials, Neopulim transparent polyimide resin, semiconductor-related materials, and others Environment/Energy: CO ₂ -derived methanol, CO ₂ -derived polycarbonate, methanol fuel cells, and others
Foundation businesses	Methanol, ammonia and amines, MMA products, energy resources and environmental businesses (geothermal and other types of power generation, water-soluble natural gas, iodine), foamed plastic (JSP), hydrogen peroxide, polycarbonate/sheet film, oxygen absorbers, and others
Unprofitable businesses or those needing rebuilding	Formalin and polyol products, and xylene separators and derivatives

Investment Plan

Planned investments going forward total ¥240 billion over three years, with a particular focus on strengthening differentiating businesses and developing new/next-generation businesses. Active investments will also be made in R&D, ESG and DX-related strategies, leading to business portfolio reform.

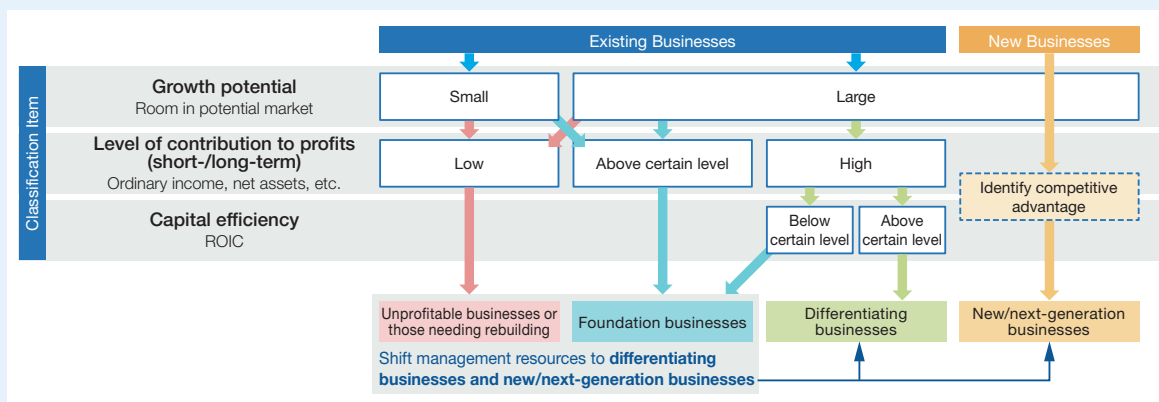
Key Investment Projects

- Aromatic aldehydes: boosting production capacity (Mizushima Plant)
- Electronic chemicals: new raw material hydrogen peroxide plant (Taiwan) and new super-pure hydrogen peroxide plant (China)
- Optical polymers: boosting production capacity (Kashima Plant) and new raw material monomer plant (Niigata Plant)
- IC plastic packaging BT materials: boosting production capacity (Thailand Plant), etc.



Classification Criteria for Business Portfolio Reform

To build a profit structure resilient to changes in the business environment, the MGC Group is reviewing the positioning and classification of all of its businesses. Each business has been classified in one of four newly-established categories: differentiating businesses; new/next-generation businesses; foundation businesses; and unprofitable businesses or those needing rebuilding. Classification is made after setting qualitative and quantitative criteria from the perspective of growth potential, level of contribution to profit, and capital efficiency. Under the new Medium-Term Management Plan, management resources will be shifted to differentiating businesses, which have both competitive advantages and the potential for growth, and new/next-generation businesses, which can be expected to grow as markets expand going forward, and which can lead to solving social issues.



Accelerating New Product Development and Cultivation

Accelerating the creation and development of new businesses is an action plan essential to carrying out business portfolio reform. That effort will be based on an emergent organization where the seeds of new business can easily grow, driven by interactions between research personnel with a wealth of knowledge and ideas. Since April 2021, MGC has worked to optimize its research promotion system through revisions to its R&D organization, and to achieve a more strategic IP landscape with the establishment of a new Intellectual Infrastructure Center.

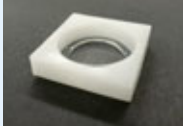



We are also actively moving forward with R&D investments, which in the three years of the new Medium-

Term Management Plan are expected to total about ¥73 billion, a level representing a 20% increase from the previous medium-term plan. At the same time, we plan to increase research personnel to over 600* in fiscal 2023. These strategies and this allocation of management resources will enhance organizational empowerment, allowing for the ongoing introduction of new products to growth markets. Note that our quantitative target is to aim for sales of new products within five years of market launch to exceed 20% versus fiscal 2020.




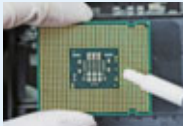
* On MGC stand-alone basis

New Product Development Topics

Solve medical and food problems

Products in Development		Status of Progress	Policies Going Forward
	Allergy Test Chips	Developing allergy test chip that can predict severity of pediatric milk allergy	▶ Efforts continue with validation by various organizations and preparation for future construction of mass-production system
	Antibacterial Non-Woven Fabric	Developed antibacterial non-woven fabric coated with special antibacterial ingredient	▶ Advancing market development in sectors including hygiene and disaster preparedness as well as food packaging by leveraging persistent antibacterial effect and durability of non-woven fabric
	Antibody Drug Contract Manufacturing Business	Manufacturing equipment deployed at Cultivex Inc. in preparation for contract manufacturing of antibody drugs Succeeded in mass cultivation of biosimilar producing cells for Denosumab, antibody drug	▶ Continue to secure commercial projects in order to expand contracting manufacturing of antibody drugs
	OXYCAPT™	In 2019, began production of OXYCAPT™, plastic syringes and vials for use as alternative to glass containers for parenteral pharmaceuticals	▶ Working to further expand product line-up and advance market development

Contribute to Development of ICT/Mobility Society

Products in Development		Status of Progress	Policies Going Forward
	Solid Electrolytes	Development continues as samples are provided to customers for review and through collaboration with public research institutions	▶ Research system expanding in anticipation of future market launch
	Carbon Fiber Composite Material	Developing carbon fiber composite materials that can contribute to metal substitutes and weight savings, utilizing seeds of research from Group companies as well	▶ Moving forward with market development through joint research with universities and through customer sample reviews
	Cellulose Fiber Composite Material	Began development of manufacturing process for high-strength cellulose fibers and fiber-reinforced resin	▶ Introducing prototyping equipment for fiber and resin development, and moving forward with customer sample reviews and market development
	New BT Materials	Capturing 5G smartphone needs through sheet products that contribute to lower dielectric constants and thinner film	▶ Proposing sheet products without glass fiber cloth, with improved electrical properties

Objective
2

Balance Social and Economic Value

~Toward Sustainable Growth~

2-1. Solve social issues through business

- Contribute to development of ICT/mobility society
- Solve energy and climate change problems
- Solve medical and food problems

2-2. Harmonize value creation with environmental protection

- Air quality control, water conservation and biodiversity conservation
- Reduction of industrial waste

2-3. Strengthen discipline and foundation supporting business activities

- Cultivating a corporate culture of job satisfaction
- Occupational safety and health, process safety and disaster prevention
- Highly energy- and resource-efficient production
- Promotion of innovative R&D

 Please refer to "MGC's Roadmap for Achieving Carbon Neutrality by 2050" on page 46 for details on environmental targets.

The MGC Group has positioned improving corporate value as an important management issue, and we believe that improving corporate value will benefit shareholders and all stakeholders. At the same time, we also believe that corporate value can be improved through efforts that address issues of the natural environment and society, including our response to climate change problems and the cultivation of a corporate culture of job satisfaction. Thus, the MGC Group set balancing social and economic value as the second objective under the new Medium-

Term Management Plan. This objective also aligns with our Group mission of "Creating value to share with society."







To make this a more concrete, effective objective, we will promote materiality management centered on three strategies, achieving long-term growth for the MGC Group while at the same time contributing to the formation of a sustainable society. In solving social issues through business, we are particularly focused on developing technologies and methods for solving issues that are uniquely within our capabilities as a chemical manufacturer.

Establishing KPIs for Materiality




The MGC Group identified priority issues (materiality) to be addressed by management in fiscal 2020. In May 2021, we went on to set KPIs for fiscal 2030 targets and fiscal 2023 targets for achieving those goals, as we worked to ensure steady progress in materiality management in line with the formulation of the new Medium-Term Management Plan. Specifically, KPIs have been defined for reducing greenhouse gas (GHG) emissions for air quality control, and for the amount of investments and R&D expenditures, etc. aimed at solving energy and climate change problems.

In narrowing down our KPI candidates, we referred to the six types of capital recognized by the International Integrated Reporting Council (IIRC) to ensure that we keep in mind medium- to long-term value creation.

To meet these KPIs, we will explore the best possible approaches to each issue, including creating innovation through development of new technologies, correcting the trajectory of existing businesses, and building partnerships, while also implementing effective materiality management.

IIRC Six Categories of Capital	KPI	Target Capital Image
 Financial Capital	<ul style="list-style-type: none"> • Sales from ICT and mobility applications • Investment in solving energy and environmental problems • Sales from medical and food applications 	Improve corporate value by creating businesses that balance social and economic value
 Manufactured Capital	<ul style="list-style-type: none"> • GHG emissions intensity compared to FY2013 	Production via highly-efficient equipment that harmonizes with environmental protection
 Intellectual Capital	<ul style="list-style-type: none"> • R&D investments devoted to solving climate change problems 	Fusion of diverse knowledge and technology that generates cross-value innovations
 Human Capital	<ul style="list-style-type: none"> • Percentage taking fewer than 10 days of annual paid leave 	Nurturing a culture of collaboration among diverse values that generates innovation, and developing human resources
 Social and Relationship Capital	<ul style="list-style-type: none"> • Serious occupational injuries • Serious accidents 	Achieve a safe, harmonious society by achieving zero accidents and zero occupational injuries
 Natural Capital	<ul style="list-style-type: none"> • GHG emissions compared to FY2013 • Renewable energy as a percentage of electric power purchased • Zero waste emission rate 	Harmonization of creation of wide-ranging value through chemistry and environmental protection

Materiality KPI

Materiality		Key MGC Initiatives	KPIs
Category	Elements		
Creating Shared Value  CSV	Contribution through business operations <ul style="list-style-type: none"> • Contribute to development of ICT/mobility society • Solve energy and climate change problems • Solve medical and food problems 	Pursuit of the potential of chemistry and advancing a balance between social and economic value, achieving even greater corporate value.	Sales from ICT and mobility applications
			Investments aimed at solving energy and climate change problems
			Sales from medical and food applications
Foundation for shared-value creation  S	Cultivating a corporate culture of job satisfaction	Promoting work-life balance; offering generous child/family care systems, creating dynamic workplace environments	Percentage taking fewer than 10 days of annual paid leave ^{*1,2}
	Occupational safety and health / Process safety and disaster prevention	Continuing to conduct occupational safety and health risk assessments, daily safety activities and safety education/training in the aim of zero occupational injuries	Serious occupational accidents ^{*1,3}
	Highly energy- and resource-efficient production	Minimizing environmental impacts in sourcing resources; efficiently using resources (energy, raw materials, water, etc.)	Serious accidents ^{*1,4}
	Promotion of innovative R&D	Developing/adopting new processes that maximally leverage core technologies cultivated over many years; founding and developing new businesses	GHG emissions intensity vs. Fiscal 2013 ^{*1}
Harmonization of shared-value creation with environmental protection  E	Proactive response to environmental problems <ul style="list-style-type: none"> • Air quality control • Water and biodiversity conservation • Reduction of industrial waste 	<ul style="list-style-type: none"> • Formulating medium-term and annual Responsible Care(RC) plans and endeavoring to achieve their targets • Reducing GHG emissions while supporting the Task Force on Climate-related Financial Disclosures 	GHG emissions vs. Fiscal 2013 ^{*1}
			Renewable energy as a percentage of electric power purchased ^{*1}
			Zero waste emission rate ^{*1,6}

*1 On a non-consolidated basis

*2 For employees granted 20 days of annual leave

*3 Accidents resulting in lost work days eligible for disability compensation, including death and permanent disability, or potential disability, with four or more lost work days






*4 Accidents that threaten third parties, including those resulting in environmental pollution involving the community or that cause damage to local residents, and other accidents involving serious damage

*5 R&D investments including basic research, pilot plants, technical testing, etc.

*6 Amount of final disposal/total amount of waste generated



Only materiality for which a KPI has been established is listed here.
Please refer to “Materiality Risks and Opportunities” on page 41 for an overview of materiality.

KPIs				IIRC Capitals (International Integrated Reporting Council)	Relationship to SDGs (Targets)
	Fiscal 2020 Results	Fiscal 2023 Targets	Fiscal 2030 Targets		
	234.2 bil. JPY	320.0 bil. JPY	Create new businesses that accelerate digital innovation	Financial Capital Capital generated through business activities or investments	 3.6  9.4
	Investment: 8.6 bil. JPY (Consolidated: 2018- 2020 cumulative) Investment: Acquisition; Financing: Approval basis	Investment: 12.0 bil. JPY (3-year cumulative) Investment: Acquisition; Financing: Approval basis	Commercialize carbon- negative technology		 9.4
	39.4 bil. JPY	50.0 bil. JPY	<ul style="list-style-type: none"> • Advance preventative/ predictive medicine; enhance healthy longevity • Further advance food preservation technology 		 3.8  12.3
	Fiscal 2019 Results	Fiscal 2023 Targets	Fiscal 2030 Targets		
	7.8% (Fiscal 2018 results)	0%	0%	Human Capital Individuals' capabilities, experience and drive for innovation	 8.5 8.8
	0	0	0	Social and Relationship Capital Social license allowing an organization to engage in business	 3.9
	1	0	0		
	14.6% reduction	19.9% reduction	28.0% reduction	Manufactured Capital Manufactured goods that can be used by the organization in the production of products or in service provision	 7.3
	3.8% of R&D expenditures	5% or more of R&D expenditures	7% or more of R&D expenditures	Intellectual Capital Organizational, knowledge-based intangible assets	 9.5
	23% reduction	28% reduction	36% reduction	Natural Capital All renewable and non- renewable environmental resources and processes that form the foundation of an organization's success	 13.2  7.2
	0%	10%	50%		 12.5
	0.8%	0.3% or less	0.15% or less		